



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,121	06/25/2004	Seiichiro Udagawa	4724-0019WOUS	7905
35301	7590	05/20/2008		
MCCORMICK, PAULDING & HUBER LLP				
CITY PLACE II				
185 ASYLUM STREET				
HARTFORD, CT 06103				
EXAMINER				
WEINSTEIN, LEONARD J				
ART UNIT		PAPER NUMBER		
3746				
MAIL DATE		DELIVERY MODE		
05/20/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,121

Applicant(s)

UDAGAWA, SEIICHIRO

Examiner

LEONARD J. WEINSTEIN

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)
Paper No(s)/Mail Date 12/04/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the amendment of December 4, 2007, specifically the Information Disclosure Statement therewith. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.
2. The information disclosure statement and the references cited on said statement were not made available to the examiner at the time prior office action was produced. The examiner notes that applicant timely submitted both the information disclosure statement and the copies of the foreign references cited with the amendment of December 4, 2007.
3. The indicated allowability of claims 5 and 6 is withdrawn in view of the newly discovered reference(s) to JP 40-18958 and further consideration being given to the prior art cited. Rejections based on the newly and previously cited reference(s) follow.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Upon further consideration of the method of claim 5 new issues have been brought to light that necessitate the following rejection under 35 U.S.C. 112, second paragraph. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 5 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the specification teaches on page 16 [¶0060]

Art Unit: 3746

a first process wherein sucking operation as shown in figure 2A and a discharging operation as shown in figure 2B, is necessary to ensure that a supply apparatus is maintained in a state where it is filled with chemical liquid before a sucking operation as claimed (second process as disclosed on page 17 [¶ 0062] as shown in figure 10A). Support for this first process being a necessary and essential step in a method that includes the sucking and discharging operations as claimed can be found in the specification on pages 17 and 18, [¶0061] and [¶0064]. The chemical supply apparatus cannot perform the steps of the method as claimed in claim 5 without performing the sucking and discharge operations of figures 2A and 2B. Without including a recitation of these method steps, the method of limitations of claim 5 would not explicitly claim a method that could be performed without damaging a pump. As claimed the chemical supply apparatus would contain a requisite degree of air that would eventually lead to cavitation and damage a pump.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Yajima US 6,539,986.

Art Unit: 3746

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In the embodiment of figure 2, Yajima teaches all the limitations as claimed for a chemical supply apparatus a pump 1 discharging a liquid by communicating with the liquid accommodated in a liquid tank 6 through a liquid introduction flow path 7 to which a pump inlet-side valve 8 for opening/closing the flow path is provided, a filter 17 connected to said pump 1 through a pump outlet flow path, as defined by the line connecting element 15 and element 17, provided with a pump discharge-side valve 15 and opened/closed by said pump discharge-side valve 15, and a liquid dispense portion 13 connected to said filter 17 through a liquid discharge flow path 14 provided with a discharge valve 16 and opened/closed by said discharge valve 16, and dispensing the liquid in said liquid tank from said liquid dispense portion 13, the apparatus then performing the deaerating method comprising the steps of: performing operation, as depicted in figure 6, of said pump 1 under such a state that a deaeration valve 9 provided to an exhaust flow path 10 communicating with an inlet side (left side in communication with element 15) of said filter 17, said pump inlet-side valve 15, and said discharge valve 16 are closed and that said pump discharge-side valve 15 is opened, as shown by the time graph in figure 6 where the valves as discussed are found to be in the condition that is claimed during the time between segments S_1 and S_2 during operation, and performing an operation of said pump 1 under such a state that said

Art Unit: 3746

deaeration valve 9 and said pump discharge-side valve 15 are opened and said pump inlet-side valve 8 and said discharge valve 16 are closed, as shown by time graph in figure 6 with the operational states of each the valves as discussed during the S_1 time segment of operation.

In the embodiment of figure 2, Yajima teaches all the limitations as claimed for a chemical supply apparatus including: a pump discharging 1 a liquid by communicating with the liquid accommodated in a liquid tank 6 through a liquid introduction flow path 7 to which a pump inlet-side valve 8 for opening/closing the flow path 7 is provided, a filter 17 connected to said pump 1 through a pump outlet flow path, as shown in figure 2 with the path connecting element 15 and 17, provided with a pump discharge-side valve 15 and opened/closed by said pump discharge-side valve 15, a liquid dispense portion 13 connected to said filter 17 through a liquid discharge flow path 14 provided with a discharge valve 16, the liquid in said liquid tank 6 being dispensed from said liquid dispense portion 13, an exhaust flow path 10 provided in communication with an inlet side (side of element 17 connected to element 15 via path as discussed) of said filter 17, and a deaeration valve 9 provided to said exhaust flow path 10, the deaeration valve 9 capable closing said exhaust flow path 10 wherein the chemical supply apparatus is capable of performing a sucking operation of said pump 1 under such a state in which said deaeration valve 9, said pump inlet-side valve 8 and said discharge valve 16 are capable of being closed, and said pump discharge-side valve 15 is simultaneously capable of being opened, and wherein a chemical supply apparatus is capable of performing a discharging operation of said pump 1 in which said deaeration valve 9 opens an exhaust flow path 10, and deaeration valve 9 and said pump

Art Unit: 3746

discharge-side valve 15 are opened, and said pump inlet-side valve 8 and said discharge valve 16 are closed.

Response to Arguments

9. In the instant case Applicant's arguments included in the remarks section of the amendment of December 4, 2007 are applicable.

10. Applicant's arguments filed December 4, 2007 have been fully considered but they are not persuasive. It is noted that the reference cited of Yajima US 6,539,986 is commonly own by Koganei Corporation and is not available under 35 U.S.C. 103(a). However after further consideration of the claims as amended the examiner has set forth a new grounds for rejection based on figure 6 of Yajima US 6,539,986. It is noted that Yajima is available under 35 U.S.C. 102(e) as the filing date of September 7, 2001 precedes the Japanese priority date of the instant application.

11. The limitations of claim 5 have been further considered and it has been determined that the method of claim 5 is subject to rejection under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit
3683

/Leonard J Weinstein/
Examiner, Art Unit 3746